

- 1 -

SEQUENCE LISTING

<110> Bayer AG, BHC

<120> Isolated fluorescent protein CGFP and use thereof

<130> Le A 36 493

<160> 2

<170> PatentIn version 3.1

<210> 1

<211> 708

<212> DNA

<213> Clytia gregaria

<400> 1

```

atgactgcac ttaccgaagg agcaaaactg ttcgagaaag aaattcccta cattacagag      60
ttggaaggag acgttgaagg aatgaaattc atcatcaaag gtgaaggtac tggcgacgct      120
actactggca ccatcaaagc gaaatatatt tgcacaactg gtgaccttc tgtaccatgg      180
gctaccatct tgagtagttt gtcgtatggt gttttctggt tcgctaagta tccacgccac      240
attgccgact ttttcaagag cacacaacca gatggttatt cacaagacag aatcattagt      300
tttgacaatg atggacaata cgatgtcaaa gccaagggtta cttatgaaaa cggaacactt      360
tataatagag tcacagtcaa aggtactggc ttcaaatcaa acggcaacat ccttggtatg      420
agagttctct accattcacc accacacgct gtctacatcc ttcctgaccg taaaaatggg      480
ggcatgaaaa ttgaatacaa taaggctttc gacgttatgg gcggtgggtca ccaaattggcg      540
cgtcacgccc aattcaataa accactagga gcctgggaag aagattatcc gttgtatcat      600
catcttaccg tatggacttc tttcggaaaa gatccggatg atgatgaaac tgaccatttg      660
accatcgtcg aagtcatcaa agctgttgat ttggaaacat accgttga      708

```

<210> 2

<211> 235

<212> PRT

<213> Clytia gregaria

<400> 2

```

Met Thr Ala Leu Thr Glu Gly Ala Lys Leu Phe Glu Lys Glu Ile Pro
1           5           10           15
Tyr Ile Thr Glu Leu Glu Gly Asp Val Glu Gly Met Lys Phe Ile Ile
          20           25           30
Lys Gly Glu Gly Thr Gly Asp Ala Thr Thr Gly Thr Ile Lys Ala Lys
          35           40           45
Tyr Ile Cys Thr Thr Gly Asp Leu Pro Val Pro Trp Ala Thr Ile Leu
          50           55           60

```

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Ser | Ser | Leu | Ser | Tyr | Gly | Val | Phe | Cys | Phe | Ala | Lys | Tyr | Pro | Arg | His |
| 65 | | | | | 70 | | | | | 75 | | | | | 80 |
| Ile | Ala | Asp | Phe | Phe | Lys | Ser | Thr | Gln | Pro | Asp | Gly | Tyr | Ser | Gln | Asp |
| | | | | 85 | | | | | 90 | | | | | 95 | |
| Arg | Ile | Ile | Ser | Phe | Asp | Asn | Asp | Gly | Gln | Tyr | Asp | Val | Lys | Ala | Lys |
| | | | 100 | | | | | 105 | | | | | 110 | | |
| Val | Thr | Tyr | Glu | Asn | Gly | Thr | Leu | Tyr | Asn | Arg | Val | Thr | Val | Lys | Gly |
| | 115 | | | | | | 120 | | | | | 125 | | | |
| Thr | Gly | Phe | Lys | Ser | Asn | Gly | Asn | Ile | Leu | Gly | Met | Arg | Val | Leu | Tyr |
| | 130 | | | | | 135 | | | | | 140 | | | | |
| His | Ser | Pro | Pro | His | Ala | Val | Tyr | Ile | Leu | Pro | Asp | Arg | Lys | Asn | Gly |
| 145 | | | | | 150 | | | | | 155 | | | | | 160 |
| Gly | Met | Lys | Ile | Glu | Tyr | Asn | Lys | Ala | Phe | Asp | Val | Met | Gly | Gly | Gly |
| | | | 165 | | | | | | 170 | | | | 175 | | |
| His | Gln | Met | Ala | Arg | His | Ala | Gln | Phe | Asn | Lys | Pro | Leu | Gly | Ala | Trp |
| | | | 180 | | | | | 185 | | | | | 190 | | |
| Glu | Glu | Asp | Tyr | Pro | Leu | Tyr | His | His | Leu | Thr | Val | Trp | Thr | Ser | Phe |
| | 195 | | | | | | 200 | | | | | 205 | | | |
| Gly | Lys | Asp | Pro | Asp | Asp | Asp | Glu | Thr | Asp | His | Leu | Thr | Ile | Val | Glu |
| | 210 | | | | | 215 | | | | | 220 | | | | |
| Val | Ile | Lys | Ala | Val | Asp | Leu | Glu | Thr | Tyr | Arg | | | | | |
| 225 | | | | | 230 | | | | | 235 | | | | | |

SEQUENCE LISTING

<110> Bayer HealthCare AG
Golz, Stefan
Markova, Svetlana
Burakova, Ludmila
Frank, Ludmila
Vysotski, Eugene

<120> ISOLATED FLUORESCENT PROTEIN FROM CLYTIA GREGARIA (CGFP) AND USE THEREOF

<130> LeA 36 493

<150> PCT/EP2003/013281

<151> 2003-11-26

<150> DE 102 57 354.9

<151> 2002-12-09

<160> 2

<170> PatentIn version 3.3

<210> 1

<211> 708

<212> DNA

<213> Clytia gregaria

<400> 1

```
atgactgcac ttaccgaagg agcaaaactg ttcgagaaag aaattcccta cattacagag      60
ttggaaggag acgttgaagg aatgaaattc atcatcaaag gtgaaggtag tggcgacgct      120
actactggca ccatcaaagc gaaatatatt tgcacaactg gtgaccttcc tgtaccatgg      180
gctaccatct tgagtagttt gtcgtatggg gttttctgtt tcgctaagta tccacgccac      240
attgccgact ttttcaagag cacacaacca gatgggtatt cacaagacag aatcattagt      300
tttgacaatg atggacaata cgatgtcaaa gccaagggtta cttatgaaaa cggaacactt      360
tataatagag tcacagtcaa aggtactggc ttcaaataca acggcaacat ccttggtatg      420
agagttctct accattcacc accacacgct gtctacatcc ttcctgaccg taaaaatggt      480
ggcatgaaaa ttgaatacaa taaggctttc gacgttatgg gcggtggtca ccaaattggcg      540
cgtcacgccc aattcaataa accactagga gcctgggaag aagattatcc gttgtatcat      600
catcttaccg tatggacttc tttcggaaaa gatccggatg atgatgaaac tgaccatttg      660
accatcgctc aagtcatcaa agctgttgat ttggaaacat accgttga      708
```

<210> 2

<211> 235

<212> PRT

<213> Clytia gregaria

<400> 2

```
Met Thr Ala Leu Thr Glu Gly Ala Lys Leu Phe Glu Lys Glu Ile Pro
1           5           10           15
```

```
Tyr Ile Thr Glu Leu Glu Gly Asp Val Glu Gly Met Lys Phe Ile Ile
20           25           30
```

Lys Gly Glu Gly Thr Gly Asp Ala Thr Thr Gly Thr Ile Lys Ala Lys
 35 40 45
 Tyr Ile Cys Thr Thr Gly Asp Leu Pro Val Pro Trp Ala Thr Ile Leu
 50 55 60
 Ser Ser Leu Ser Tyr Gly Val Phe Cys Phe Ala Lys Tyr Pro Arg His
 65 70 75 80
 Ile Ala Asp Phe Phe Lys Ser Thr Gln Pro Asp Gly Tyr Ser Gln Asp
 85 90 95
 Arg Ile Ile Ser Phe Asp Asn Asp Gly Gln Tyr Asp Val Lys Ala Lys
 100 105 110
 Val Thr Tyr Glu Asn Gly Thr Leu Tyr Asn Arg Val Thr Val Lys Gly
 115 120 125
 Thr Gly Phe Lys Ser Asn Gly Asn Ile Leu Gly Met Arg Val Leu Tyr
 130 135 140
 His Ser Pro Pro His Ala Val Tyr Ile Leu Pro Asp Arg Lys Asn Gly
 145 150 155 160
 Gly Met Lys Ile Glu Tyr Asn Lys Ala Phe Asp Val Met Gly Gly Gly
 165 170 175
 His Gln Met Ala Arg His Ala Gln Phe Asn Lys Pro Leu Gly Ala Trp
 180 185 190
 Glu Glu Asp Tyr Pro Leu Tyr His His Leu Thr Val Trp Thr Ser Phe
 195 200 205
 Gly Lys Asp Pro Asp Asp Asp Glu Thr Asp His Leu Thr Ile Val Glu
 210 215 220
 Val Ile Lys Ala Val Asp Leu Glu Thr Tyr Arg
 225 230 235